## 510(k) SUMMARY (Per 21 CFR 807.92)

JAN 1 1 2013

## **General Company Information**

Name:

Musculoskeletal Transplant Foundation

Contact:

Nancy Joy

Senior Regulatory Affairs Submission Specialist

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125 May Street

Edison, NJ 08837 USA

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**Date Prepared** 

December 14, 2012

#### **General Device Information**

Product Name:

The MTF New Bone Void Filler

Classification:

Bone Void Filler Containing Human Bone

21 CFR §888.3045 – Product code: MBP, MQV-

Class II

**Predicate Devices** 

The MTF New Bone Void Filler

Musculoskeletal Transplant Foundation

510(k) K110003, K113167

DBX® Demineralized Bone Matrix Musculoskeletal Transplant Foundation 510(k) K040262, K103784, K103795

DBX Strip®

Musculoskeletal Transplant Foundation

510(k) K042829, K062205

#### Osteoinductive Potential

The MTF New Bone Void Filler is osteoconductive and has been shown to have osteoinductive potential in an athymic mouse model. Every lot of final product is tested to ensure the osteoinductive potential of the final product. Standard testing performed in an athymic mouse model must prove positive for lot release. It is unknown how the osteoinductive potential, measured in the athymic mouse model, will correlate with clinical performance in human subjects.

#### **Description**

The MTF New Bone Void Filler (BVF) is processed human bone that has been demineralized and combined with gelatin and sodium hyaluronate, which are naturally derived materials that are biocompatible and biodegradable. The sodium hyaluronate used in the manufacturing of BVF is not of animal origin. BVF comes in the form of a mixture of demineralized bone with gelatin and sodium hyaluronate, and a spatula that is necessary to mix the components. A hydrating agent, such as blood and saline, can be used with BVF. Upon addition of a hydrating agent, BVF will achieve a flowable or moldable consistency. The resultant putty can then be manipulated by a surgeon into various shapes for ease and flexibility of use during surgical application.

### **Intended Use (Indications)**

The MTF New Bone Void Filler is intended for use as a Demineralized Bone Matrix for voids or gaps that are not intrinsic to the stability of the bony structure. The MTF New Bone Void Filler is indicated for treatment of surgically created osseous defects or osseous defects created from traumatic injury. The MTF New Bone Void Filler must be used in the posterolateral spine with bone marrow aspirate or autograft.

The MTF New Bone Void Filler is for single patient use only.

#### Viral Clearance and Inactivation

A panel of model potential human viruses representing various virus types, sizes, shapes and genomes were evaluated. The viral inactivation testing demonstrated suitable viral inactivation potential of the processing method for a wide spectrum of potential human viruses. The MTF New Bone Void Filler process further reduces the risk of viral contamination beyond donor testing and screening procedures.

## Substantial Equivalence

This submission supports the position that the MTF New Bone Void Filler is substantially equivalent to a number of previously cleared devices, including:

The MTF New Bone Void Filler- Musculoskeletal Transplant Foundation [K110003, K113167]

DBX® Demineralized Bone Matrix - Musculoskeletal Transplant Foundation [K040262, K103784, K103795]

DBX Strip® - Musculoskeletal Transplant Foundation [K042829, K062205]

When comparing the MTF New Bone Void Filler to its predicate devices, there are no new types of safety and effectiveness questions. The MTF New Bone Void Filler has been demonstrated to be substantially equivalent to its predicate devices in the animal study provided within this submission.

## **Safety and Effectiveness Information**

The MTF New Bone Void Filler is single-donor processed. The MTF New Bone Void Filler is aseptically processed and passes USP <71> Sterility Tests. The donor suitability criteria used to screen this donor are in compliance with the FDA regulations published in 21 CFR Part 1271 Human Cells, Tissues, and Cellular and Tissue Based Products.

#### Conclusion

Musculoskeletal Transplant Foundation believes that the information provided in this 510(k) submission establishes that similar legally marketed devices have been used for the same clinical applications as the MTF New Bone Void Filler. The materials from which the MTF New Bone Void Filler is fabricated have an established history of use, and the device has been tested in accordance with applicable FDA guidelines.

Letter dated: January 11, 2013



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

Musculoskeletal Transplant Foundation % Ms. Nancy Joy Senior Regulatory Affairs Submission Specialist 125 May Street Edison, New Jersey 08837

Re: K121313

Trade/Device Name: MTF New Bone Void Filler

Regulation Number: 21 CFR 888.3045

Regulation Name: Resorbable calcium salt bone void filler device

Regulatory Class: Class II Product Code: MQV, MBP Dated: December 6, 2012 Received: December 10, 2012

Dear Ms. Joy:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

# Mark N. Melkerson

Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

## INDICATIONS FOR USE

510(k) Number (if known): K121313
Device Name: MTF New Bone Void Filler
Indications for Use:
The MTF New Bone Void Filler is intended for use as a Demineralized Bone Matrix for voids or gaps that are not intrinsic to the stability of the bony structure. The MTF New Bone Void Filler is indicated for treatment of surgically created osseous defects or osseous defects created from traumatic injury. The MTF New Bone Void Filler must be used in the posterolateral spine with bone marrow aspirate or autograft.  The MTF New Bone Void Filler is for single patient use only.
Prescription Use X Over-The-Counter Use (Per 21 CFR 801 Subpart D) (Per 21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE—CONTINUE ON ANOTHER PAGE IF NEEDED.)
Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)
Division of Orthopedic Devices
510(k) Number K121313